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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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06/03/2004

SKJERVEN MORRILL LLP 25 METRO DRIVE SUITE 700 SAN JOSE, CA 95110 EXAMINER
DINH, TUAN T

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PAPER NUMBER

2827 DATE MAILED: 06/03/2004

ART UNIT

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/966,841	09/27/2001	Thomas P. Glenn	M-9225 US	4983	

TITLE OF INVENTION: INTEGRATED CIRCUIT PACKAGE INCLUDING INTERCONNECTION POSTS FOR MULTIPLE ELECTRICAL CONNECTIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1330	\$0	\$1330	09/03/2004	

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 24251 7590 06/03/2004 SKJERVEN MORRILL LLP Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. 25 METRO DRIVE **SUITE 700** SAN JOSE, CA 95110 (Depositor's name) (Signature) APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/966,841 09/27/2001 Thomas P. Glenn M-9225 US 4983 TITLE OF INVENTION: INTEGRATED CIRCUIT PACKAGE INCLUDING INTERCONNECTION POSTS FOR MULTIPLE ELECTRICAL CONNECTIONS APPLN. TYPE SMALL ENTITY **ISSUE FEE** PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1330 \$0 \$1330 09/03/2004 **EXAMINER** ART UNIT **CLASS-SUBCLASS** DINH, TUAN T 2827 361-767000 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name Number is required. will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual Corporation or other private group entity government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee ☐ A check in the amount of the fee(s) is enclosed. ☐ Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Advance Order - # of Copies \_ ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this form). (enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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APPLICATION NO. FI		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/966,841		09/27/2001	Thomas P. Glenn	M-9225 US	4983		
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SKJERVEN M		LLLP	DINH, TUAN T				
25 METRO DRIVE SUITE 700				ART UNIT	PAPER NUMBER		
SAN JOSE, CA	95110			2827			
				DATE MAILED: 06/03/2004	DATE MAILED: 06/03/2004		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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	Аррисан и н .	Applicant(s)
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	Tuan T Dinh	2827
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOT THE OFFICE OF UPON PETRON PROBLEM SEE 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commul GHTS. This application is su	this application. If not included
<ol> <li>This communication is responsive to <u>04/05/04</u>.</li> </ol>		
2. The allowed claim(s) is/are 33 (renumber claim 1)		
3. $\square$ The drawings filed on $\underline{09/11/03}$ are accepted by the Examir	ner.	
<ol> <li>Acknowledgment is made of a claim for foreign priority under a)</li></ol>	been received. been received in Application cuments have been received	n No In this national stage application from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a ENT of this application.	a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give	tted. Note the attached EXA s reason(s) why the oath or	MINER'S AMENDMENT or NOTICE OF declaration is deficient.
<ul> <li>6.  CORRECTED DRAWINGS (as "replacement sheets") must</li> <li>(a)  including changes required by the Notice of Draftsperso</li> <li>1)  hereto or 2)  to Paper No./Mail Date</li> <li>(b)  including changes required by the attached Examiner's Paper No./Mail Date</li> </ul>	on's Patent Drawing Review	
Identifying indicia such as the application number (see 37 CFR 1.8 ach she t. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the	e drawings in the front (not the back) f
DEPOSIT OF and/or INFORMATION about the depos attached Examiner's comment regarding REQUIREMENT F	it of BIOLOGICAL MATE	RIAL must be submitted. Note the
Attachment(s)		
1.   Notice of References Cited (PTO-892)	5. ☐ Notice of Info	ormal Patent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Su	mmary (PTO-413),
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08	Paper No./M B), 7. ⊠ Examiner's A	Mail Date Amendment/Comment
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	8. ⊠ Examiner's S	Statement of Reasons for Allowance
of Biological Material	9.  Other	

### **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James E. Parsons (Reg. No. 34,691) on May 20, 2004.

The application has been amended as follows:

Claim 33, lines 19-20, change "through a said circuit pattern and a said via" to – through at least one said circuit patterns and at least one said vias" for proper antecedent basis.

# Allowable Subject Matter

2. Claim 33 is (renumber claim is 1) allowed.

The following is an examiner's statement of reasons for allowance: the references cited discloses an integrated circuit (IC) package comprising: a molded plastic body, at least four plastic posts, a plurality of electrically separate metal terminals and conductive circuit patterns, an integrate circuit (IC), and some of claimed elements. However, they do not disclose or render obvious in combination of the IC package

Application/Control Number: 09/966,841

Art Unit: 2827

having at least some of the terminals on each of the at least four posts being electrically connected to the IC through at least one of said circuit patterns and said vias.

Also, there is no suggestion to modify the references to include these limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Watari and Fasano et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Dinh May 20, 2004.

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*	Α	US-4,819,131	Watari, Toshihiko			361/794	
*	В	US-5,791,911	Fasano et al.			439/63	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Sheet 1 of 1

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	AB	5,579,207	11/26/96	Hayden, et al.	361	790			
	AC	5,222,014	6/22/93	Lin	361	414	<del>  -</del>		
	AD	5,523,628	6/4/96	Williams, et al.	257	777	<del></del>		
<b>-</b>	AE	5,783,870	7/21/98	Mostafazadeh, et al.	257	791			
	AF	6,396,143 B1	5/28/02	Kimbara, et al.	257	791	-		
•	AG	6,029,882	2/29/00	Bolde, et al.	228	254			
	AH	6,395,582 B1	5/28/02	Sohn, et al.	438	111	-		
	AI	6,013,948	1/11/00	Akram, et al.	257		<del>-  -</del>		
	AJ	5,831,832	11/3/98	Gillette, et al.	361	698 760	<del></del>	<u> </u>	
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Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Application Number 09/966,841 Substitute for form 1449A/PTO Filing Date 09/27/2001 INFORMATION DISCLOSURE First Named Inventor: Thomas P. Glenn STATEMENT BY APPLICANT Examiner name: T. Dinh **GROUP: 2827** (use as many sheets as necessary) **Sheet** of Attorney Docket Number AMK-09225 (M-9225 US) U.S. PUBLISHED PATENT APPLICATIONS Examiner Cited U.S. Patent Document Name of Patentee or Applicant of Date of Publication Pages, Columns, Lines No. 1 Kind Code 2 Initials\* Number Cited Document of Cited Document Where Relevant Info. (if known) MM-DD-YYYY Appear U.S. PATENT DOCUMENTS Examiner Cited U.S. Patent Document Name of Patentee or Applicant of Date of Publication Pages, Columns, Lines Initials\* Kind Code 2 No. 1 Number Cited Document of Cited Document Where Relevant Info. (if known) MM-DD-YYYY Appear A01 6586826 Bl Glenn et al. 07/01/2003 FOREIGN PATENT DOCUMENTS Foreign Patent Document Date of Pages, Columns, Publication of Lines Where Examiner Cited Kind Code 5 Té Name of Patentee or Applicant Cited Document Relevant Info. No. 1 Initials\* Office<sup>3</sup> Number<sup>4</sup> (if known) of Cited Document MM-DD-YYYY Appear OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** J-20-04 DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>3</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language

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